Claims

- 1. Aqueous lipid dispersions made by double-chained cationic lipids that have a bifunctional polar head and the two hydrophobic chains composed of linear alkyl (saturated) hydrocarbons are at position 1 and 3 as shown below, for nucleic acid, peptide and other synthetic molecule drug delivery.
- 2. The delivery system of claim 1, and any other ingredient that is added to the system of claim 1 for activity or other technical reasons.

$$R_2$$
 R_3
 R_1
 R_2
 R_3
 R_3
 R_4
 R_5
 R_5

Structure S of cationic lipids.

$$R = C_{11}H_{23},\, C_{13}H_{27},\, C_{15}H_{31},\, C_{17}H_{35} \; (linear \; chains)$$

$$R_1 = H, CH_3, -C(NH_2) = NH$$

$$R_2 = H, CH_3$$

 $R_3 = H, CH_3$

connector : -CH₂-, -CO-, -OCO-, CH₂CH₂, -CH₂CO-, CH₂OCO-, -CH₂CH₂CO-, -CH₂CH₂OCO-

:-CH₂-, -CO-, -NH-, -S-, -O-